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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/052,428 | 01/18/2002 | Robert Huber | 2002 P 00898 US | 2717 |

7590 09/26/2003
Siemens Corporation
Intellectual Property Department
186 Wood Avenue South
Iselin, NJ 08830

EXAMINER

TRINH, MINH N

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| ART UNIT | PAPER NUMBER |
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3729

DATE MAILED: 09/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/052,428

Applicant(s)

HUBER, ROBERT

Examiner

Minh Trinh

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title is suggested: "Manufacturing Circuit Panel Assembly Line".

2. The abstract of the invention should be revised to reflect the claimed device i.e., assembly line.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 12-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

"the panels" (claim 12, line 1) lacks antecedent basis.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 12, 13 and 18, as understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakami (US 5,983,902).

Sakami teaches a circuit panel manufacturing assembly line comprising: a circuit panel bad mark scanner 31(see Fig. 1) a panel conveyor 2 located at least between the circuit panel scanner 31 and the panel component placement machine 20 for conveying the panels. Sakami does not teach a panel component placement machine being separate from the scanner. Regarding to this, it would have been an obvious matter of design choice to have a scanner separated from a placing machine since applicant has not disclosed the location configurations as discussed above is critical, patentably distinguishing feature and it appears that the invention would perform equally well with the designation location of the scanner as suggested by Sakami (see Fig. 1, reference 31).

As applied to claims 13 and 18, regarding a line scanner, it would have been an obvious matter of design choice to pick and choose a desired line scanner since applicant has not disclosed that this particularly line scanner feature is critical, patentably distinguishing feature and it appears that the invention would perform equally well with the type of scanner as shown in the prior art reference (see Fig. 5, reference 7).

7. Claims 14-17 and 19-23, as understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakami (US 5,983,902) in view of Kou (US 6,027,019).

Sakami as applied and relied upon above does not teach a second placement machine located next to the conveyor. Kou teach a second placement machine next to

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the conveyor (see Figs. 5 and 7, and the discussed at col. 2, lines 43-44). Therefore, it would have been obvious to one ordinary having skill in the art at the time the invention was made to provide an additional placement machines with the configuration where a second being next to the conveyor as taught by Kou onto the invention of Sakami in order to obtain a high volume productivity. Furthermore, regarding the limitation a second placement machine associated with the conveyor, it would have been obvious to one ordinary skill in the art at the time the invention was made to employ a number of placement machines next to the conveyor for various known benefits including facilitate the operation process in order to produce the part in an effectively manner.

As applied to claim 15, noting that Kou does teach the bar code scanner (see abstract lines 6-7) and the associated location i.e. the bar code scanner being located next to the conveyor (see Fig. 7).

As applied to claim 16, regarding the location of the bar code, it would have been an obvious matter of design choice to connect the barcode between the scanner and the placement machine since applicant has not disclosed the exact location configurations is critical, patentably distinguishing feature and it appears that the invention would perform equally well with the configuration as shown by Kou's figure 7.

As applied to claim 17, regarding the processor connected the scanner and the placement machine. It is conventional and well known in the art to control the process by utilize the processor (computer) in order to facilitate the scanning, placing and mounting processes by utilizing the available techniques.

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8. Claims 19-22 and 23, as understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakami in view of Kou.

As applied to claim 19, Kou teaches the regarding a communication network connecting the scanner and the placement machine (see Figs. 5-6).

As applied to claims 20-23, with regarding that the communication network is a LAN, a WAN, or others associated thereof. These communication network features are conventional and well known in the art. Therefore, it would have been an obvious matter of design choice to choose any desired network transmitting device since applicant has not disclosed that the communication network being a LAN, a wireless, a WAN and/or a global information network would solve any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the system configurations network as shown by Kou's figure 5-6.

Prior Art References

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prior art references are cited for their teaching of Scanner device for detecting bad mark on the PCB.


Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Trinh whose telephone number is (703) 305-2887. The examiner can normally be reached on Monday -Thursday 8:00 am to 4:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (703) 308-1789. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7307 for regular communications and (703) 305-3579 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

A handwritten signature in black ink, appearing to be 'M. H. H.', followed by a horizontal line.

Examiner, AU 3729

mt
September 22, 2003